REMARKS

This is in response to the Office Action mailed September 10, 2004. Claims 1-3, 8-14, 16-27 and 29-34 were rejected as obvious in view of the combination of EP 0 919 788 A1 ("Meek") and U.S. Pat. No. 6,256,038 ("Krishnamurthy"), Claims 4, 15, 28 and 35 were rejected as obvious in view of the combination of Meek, Krishnamurthy and U.S. Pat. No. 6,639,592 ("Dayanand"), and Claims 5-7 were rejected as obvious in view of the combination of Meek, Krishnamurthy and U.S. Pat. No. 6,253,164 ("Rohm").

Applicants have amended Claims 1, 14, 16, 23 and 29 and added new Claims 36 and 37. Applicants respectfully request reconsideration of the present application. Applicants submit that Claims 1-37 are in condition for allowance.

Independent Claim 1

Applicants' independent Claim 1 relates to a method for representing geographic features. Claim 1 recites "fitting a polynomial spline to the at least one geographic feature" by using the data points specifying latitude and longitude coordinates to generate a plurality of control points for the polynomial spline. Claim 1 is not obvious in view of the combination of Meek and Krisnamurthy because the combination fails to disclose or suggest this claim element.

First, as indicated by the Office Action, Meek does not disclose fitting a polynomial spline to the at least one geographic feature. (*see*, Office Action, page 2).

Second, Krisnamurthy fails to disclose or suggest the claim element of fitting a polynomial spline to the at least one geographic feature. Briefly, Krisnamurthy discloses a method for fitting smooth surfaces to scanned surfaces of objects obtained with laser and photogrametry scanning. (*see*, Krisnamurthy: column 2, lines 28-36; column 3, lines 20-25). Polygon meshes representing the scanned surfaces comprise a set of vertices, a set of edges and a set of faces in Euclidean space. (*see*, Krisnamurthy: column 8, lines 15-21). Krisnamurthy's fitting algorithm first derives an approximation mesh that mirrors the input polygon mesh in areas identified for high fidelity and lessens the details of the input polygon

mesh in areas identified for lower fidelity. Next, a least squares operation generates a smooth surface from the approximation mesh. (*see*, Krisnamurthy: column 6, lines 45-52, 60-63).

Krisnamurthy does not disclose fitting a polynomial spline to a geographic feature. In fact, Krisnamurthy completely fails to mention geographic features, such as a road. Rather, Krisnamurthy merely describes fitting smooth surfaces to polygon meshes representing small objects. Additionally, Krisnamurthy fails to disclose or suggest fitting a polynomial spline by using the data points specifying latitude and longitude coordinates of locations along the geographic feature. In contrast, Krisnamurthy fits smooth surfaces to polygons comprising vertices, edges and faces obtained by optical scanning of small objects. Thus, Krisnamurthy fails to disclose the fitting a polynomial spline to a geographic feature claim element.

Furthermore, there is no suggestion or motivation to combine the Meek and Krishnamurthy references. In fact, Krishnamurthy is nonanalogous art to the present application. In order to rely on a reference for 35 U.S.C. 103, the reference must be either in the field of the Applicants' endeavor or reasonably pertinent to the particular problem with which the inventors were concerned. (*see*, MPEP 2141.01(a)). Krishnamurthy discloses a parameterized surface fitting technique to form 3-D models of objects for industrial designs, CNC milling manufacturing, and medical imaging. (*See*, Krishnamurthy: Col. 49, lines 23-26). The application's field of endeavor is cartographic databases, and Krishnamurthy fails to mention geographic features and geographic data. Additionally, the particular problem with which the inventors were concerned is representing and storing geographic features in a cartographic database. (*see*, Specification, page 2, lines 16-20). Krisnamurthy is totally unrelated and not reasonably pertinent to representing and storing geographic features and cartographic databases. In contrast, Krisnamurthy is pertinent to modeling the surface of small objects scanned with a laser and photometry. Thus, Krisnamurthy is not analogous prior art. Moreover, because the areas of application of the Krishnamurthy method are so diverse and distinct from the geographic field of Meek, there is no suggestion or motivation to combine the references.

For at least the above reasons, Claim 1 is not obvious in view of the combination of Meek and Krisnamurthy. Thus, independent Claim 1 is in condition for allowance.

Independent Claim 14

Applicants' independent Claim 14 relates to a method of displaying a function representing a geographic feature. Claim 14 recites "a plurality of spline control points associated with the geographic feature," the spline control points being derived from a plurality of data points specifying latitude and longitude coordinates of locations along the geographic feature. Claim 14 is not obvious in view of the combination of Meek and Krisnamurthy because the combination fails to disclose or suggest this claim element. For at least the reasons discussed above in conjunction with Claim 1, Claim 14 is not obvious in view of the combination of Meek and Krisnamurthy. Thus, independent Claim 14 is in condition for allowance.

Independent Claim 16

Applicants' independent Claim 16 recites "fitting a polynomial spline to each of the geographic features" by computing a plurality of control points yielding the least squares approximation to the corresponding set of data points specifying latitude and longitude coordinates. Claim 16 is not obvious in view of the combination of Meek and Krisnamurthy because the combination fails to disclose or suggest this claim element. For at least the reasons discussed above in conjunction with Claim 1, Claim 16 is not obvious in view of the combination of Meek and Krisnamurthy. Thus, independent Claim 16 is in condition for allowance.

Independent Claim 23

Applicants' independent Claim 23 recites spline control points being derived from a plurality of data points specifying latitude and longitude coordinates of locations along the geographic feature. Claim 23 is not obvious in view of the combination of Meek and Krisnamurthy because the combination fails to disclose or suggest this claim element. For at least the reasons discussed above in conjunction with Claim 1, Claim 23 is not obvious in view of the combination of Meek and Krisnamurthy. Thus, independent Claim 23 is in condition for allowance.

Independent Claim 29

Applicants' independent Claim 29 recites a processor configured to apply a least squares approximation to the data points specifying latitude and longitude coordinates to generate the plurality of control points for a polynomial spline. Claim 29 is not obvious in view of the combination of Meek and Krisnamurthy because the combination fails to disclose or suggest this claim element. For at least the reasons discussed above in conjunction with Claim 1, Claim 29 is not obvious in view of the combination of Meek and Krisnamurthy. Thus, independent Claim 29 is in condition for allowance.

Dependent Claims 2-13, 15, 17-22, 24-28 and 30-37

Applicants' dependent Claims 2-13, 15, 17-22, 24-28 and 30-37 are allowable at least for the reason that they depend upon allowable base claims. In addition, these claims include features that are not disclosed by the cited references.

Conclusion

With the present response, all the issues in the Office Action mailed September 10, 2004 have been addressed. Applicant submits that the present application has been placed in condition for allowance. If any issues remain, the Examiner is requested to call the undersigned at the telephone number indicated below.

Respectfully submitted,

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